6. The compound of claim **1**, wherein the compound is selected from the group consisting of:

$$(PEG)_{m} - X - X - L^{2} - X - L^{4}$$

$$R^{1} - L^{3} - L^{3} - L^{3} - L^{4}$$

$$R^{1} - L^{3} - L^{3} - L^{3} - L^{4}$$

$$R^{1} - L^{3} - L^{3} - L^{3} - L^{4}$$

$$R^{1} - R^{1} - R^{1}$$

$$R^{1} - R^{1} - R^{2}$$

$$R^{1} - L^{3} - L^{3} - L^{3} - L^{4} - R^{2}$$

$$R^{1} - L^{3} - L^{3} - L^{3} - L^{4} - R^{2}$$

$$R^{1} - L^{3} - L^{3} - L^{3} - L^{4} - R^{2}$$

$$R^{1} - L^{3} - L^{3} - L^{3} - L^{3} - L^{4} - R^{2}$$

$$R^{1} - L^{3} - L^{3} - L^{3} - L^{3} - L^{4} - R^{2}$$

$$R^{1} - L^{3} - L^{3} - L^{3} - L^{4} - R^{2}$$

$$R^{1} - L^{3} - L^{3} - L^{3} - L^{4} - R^{2}$$

$$R^{1} - L^{3} - L^{3} - L^{3} - L^{4} - R^{2}$$

$$R^{1} - L^{3} - L^{3} - L^{3} - L^{4} - R^{2}$$

$$R^{1} - L^{3} - L^{3} - L^{3} - L^{4} - R^{2}$$

$$R^{1} - L^{3} - L^{3} - L^{3} - L^{4} - R^{2}$$

$$R^{1} - L^{3} - L^{3} - L^{3} - L^{4} - R^{2}$$

$$R^{1} - L^{3} - L^{3} - L^{3} - L^{4} - R^{2}$$

$$R^{1} - L^{3} - L^{3} - L^{3} - L^{4} - R^{2}$$

$$R^{1} - L^{3} - L^{3} - L^{3} - L^{4} - R^{2}$$

$$R^{1} - L^{3} - L^{3} - L^{3} - L^{4} - R^{2}$$

$$R^{1} - L^{3} - L^{3} - L^{3} - L^{4} - R^{2}$$

$$R^{1} - L^{3} - L^{3} - L^{3} - L^{4} - R^{2}$$

$$R^{1} - L^{3} - L^{3} - L^{4} - R^{2}$$

$$R^{1} - L^{3} - L^{3} - L^{4} - R^{2}$$

$$R^{1} - L^{4$$

wherein each branched monomer unit is individually selected from a lysine moiety and arginine moiety.

- 7. The compound of claim 1, wherein at each occurrence in the compound the linker L¹, L², L³ and L⁴ each are independently selected from the group consisting of a polyethylene glycol moiety, polyserine moiety, enzyme cleavable peptide moiety, disulfide bond moiety and acid labile moiety, polyglycine moiety, poly(serine-glycine) moiety, aliphatic amino acid moieties, 6-amino hexanoic acid moiety, 5-amino pentanoic acid moiety, 4-amino butanoic acid moiety, and beta-alanine moiety.
- 8. The compound of claim 1, wherein at each occurrence in the compound the linker L^1 , L^2 , L^3 and L^4 are independently selected from the group consisting of:

- **9**. The compound of claim **1**, wherein the linker L^1 , L^2 , L^3 , L^4 or a combination thereof comprises a cleavable group.
- 10. The compound of claim 9, wherein the cleavable group is a disulfide cleavable moiety.
- 11. The compound of claim 1, wherein the $(PEG)_m$ portion of the compound is selected from the group consisting of:

wherein each K is lysine.

- 12. The compound of claim 1, wherein at least one (e.g., 1 to 128) of the R² groups are charged groups and, optionally, at least one of the R² groups are neutral groups, and, optionally, at least one of (e.g., 1 to 128) of the R¹ groups, if present, are reversible crosslinking groups.
- 13. The compound of claim 12, wherein the reversible crosslinking group(s) is/are coumarin moiety, 4-methylcoumarin moiety, boronic acid moiety or derivative or analog thereof, catechol moiety or derivative or analog thereof, cis-diol moiety or derivative or analog thereof, cinnamic acid moiety or derivative or analog thereof, chlorogenic acid moiety or derivative or analog thereof, amine moiety or a derivative thereof, carboxylic acid or a derivative thereof, acyl group, or a derivative thereof, epoxide or a derivative